

INTERNATIONAL SEARCH REPORT

Inte Application No
PCT/IB2004/000382

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B09B3/00 B29B17/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B09B B29B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/94457 A (DU PONT CANADA) 13 December 2001 (2001-12-13) page 5, line 8 - page 7, line 23; claims 1,2	1, 17, 34, 35
X	US 5 559 159 A (SUBLETT BOBBY J ET AL) 24 September 1996 (1996-09-24) abstract column 2, line 3 - line 17; example 1	1, 17, 34, 35
X	US 5 789 636 A (NIEMANN KLAUS ET AL) 4 August 1998 (1998-08-04) column 7, line 43 - line 56 column 3, line 53 - column 4, line 24; figure 1 column 2, line 61 - line 62	17-19, 35
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

T later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the International search

6 December 2004

Date of mailing of the International search report

04.01.2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 876 644 A (MOORE TONY CLIFFORD ET AL) 2 March 1999 (1999-03-02) column 3, line 1 - line 28	1-16, 34, 36
A	US 5 405 429 A (REY THEO ET AL) 11 April 1995 (1995-04-11) abstract	1
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 03, 31 March 1999 (1999-03-31) & JP 10 332118 A (MITSUI ENG & SHIPBUILD CO LTD), 15 December 1998 (1998-12-15) abstract	1-16, 34, 36
A	US 5 223 544 A (JENKS RANDY S ET AL) 29 June 1993 (1993-06-29) column 3, line 34 - column 4, line 35	17-19

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
1-20, 26-28, 34-36
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-16,34,36

Process for recycling waste including depolymerising step
and repolymerising step

2. claims: 17-20,26-28,35,36

System for recycling waste including depolymerising step

3. claims: 21-25

Multistage reactor

4. claims: 29-31

Turbo-electrophotolytic reactor

5. claim: 32

Super-oxidising mixture

6. claim: 33

Repolymerisation mixture

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0194457	A	13-12-2001	WO 0194457 A2 CA 2409837 A1 EP 1294796 A2 JP 2003535942 T US 2004186190 A1 US 2002037939 A1	13-12-2001 13-12-2001 26-03-2003 02-12-2003 23-09-2004 28-03-2002
US 5559159	A	24-09-1996	NONE	
US 5789636	A	04-08-1998	DE 4435238 A1 AT 168714 T AU 688145 B2 AU 3744895 A BG 63346 B1 BG 101423 A BR 9509235 A CA 2201777 A1 CN 1159821 A CZ 9701018 A3 DE 59502919 D1 DK 784661 T3 WO 9610619 A1 EP 0784661 A1 ES 2120770 T3 FI 971375 A GR 3027760 T3 HU 77197 A2 JP 10506662 T JP 3462216 B2 NO 971486 A NZ 294602 A PL 319453 A1 RO 118134 B1 RU 2151163 C1 SK 41997 A3 ZA 9508364 A	11-04-1996 15-08-1998 05-03-1998 26-04-1996 31-10-2001 30-12-1997 21-10-1997 11-04-1996 17-09-1997 13-08-1997 27-08-1998 16-11-1998 11-04-1996 23-07-1997 01-11-1998 03-06-1997 30-11-1998 02-03-1998 30-06-1998 05-11-2003 22-05-1997 28-01-2000 04-08-1997 28-02-2003 20-06-2000 10-09-1997 13-05-1996
US 5876644	A	02-03-1999	EP 1084171 A1 WO 0077071 A1	21-03-2001 21-12-2000
US 5405429	A	11-04-1995	CH 683676 A5 AT 183659 T CA 2095946 A1 DE 59309742 D1 DK 572769 T3 EP 0572769 A2 ES 2137953 T3 GR 3031892 T3 JP 3261416 B2 JP 6055155 A	29-04-1994 15-09-1999 13-11-1993 30-09-1999 20-03-2000 08-12-1993 01-01-2000 29-02-2000 04-03-2002 01-03-1994
JP 10332118	A	15-12-1998	NONE	
US 5223544	A	29-06-1993	AU 671109 B2 AU 3752493 A BR 9306156 A CA 2133214 A1 DE 69329279 D1	15-08-1996 08-11-1993 23-06-1998 14-10-1993 28-09-2000

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5223544	A	DE 69329279 T2	26-04-2001
		WO 9320125 A2	14-10-1993
		EP 0637326 A1	08-02-1995
		ES 2149810 T3	16-11-2000
		JP 3459919 B2	27-10-2003
		JP 7505424 T	15-06-1995
		KR 245206 B1	15-02-2000